HP recommends Windows Vista® Business

# HP Workstations

Quick Reference Guide

# YOU DESERVE A COMPETITIVE EDGE.



CUSTOMER INSPIRED-INNOVATIONS
PROVEN RELIABLE PERFORMANCE
TRUSTED INDUSTRY PARTNERSHIPS

# MEET OUR HP WORKSTATION FAMILY—COMPARE FEATURES







Gigabit PCle

Optional Intel Pro 1000 PT Gigabit

Ethernet Controller (PCIe)

|   | UD 4550   | IID 4/00   | LID (//00  |
|---|---|--|--|
| Overview  | HP xw4550  Workstation power uniquely affordable  | HP xw4600  Affordable innovation with the power to do  | HP xw6600  Workspace innovation with commanding  |
| Operating Systems   | vvorksialion power uniquely alloraable  | more more  | performance  |
| Genuine Windows Vista® Business 32-bit*   |   |  | •  |
|   | •   | •  | •  |
| Genuine Windows Vista® Business 64-bit*   | •   | •  | •  |
| <ul> <li>Genuine Windows Vista® Business 32-bit with downgrade<br/>to Windows® XP Professional 32-bit custom installed¹</li> </ul>                        | •   | •  | •  |
| <ul> <li>Genuine Windows Vista® Business 64-bit with downgrade<br/>to Windows® XP Professional 64-bit custom installed¹</li> </ul>                        | •   | •  | •  |
| • Red Hat Enterprise Linux® WS 5 64-bit   |   | •  | •  |
| <ul> <li>HP Installer Kit for Linux (includes drivers for both 32-bit<br/>and 64-bit OS; versions of Red Hat Enterprise Linux<br/>WS4 and WS5)</li> </ul> | •   | •  | •  |
| Certified on Novell Linux Desktop 9   | •   | •  | •  |
| Red Flag Linux v5 (available in China only)   | •   | •  |  |
| • Free DOS  |   |  |  |
| Processor/chipset/system bus  | Second-Generation AMD Opteron™ 1000² Series processors with HyperTransport™     Dual and Quad Cora³     1 MB L2 Cache per core     1000 MHz HyperTransport     AMD 690G with ATI Radeon X1250 chipset | Intel® Pentium®³ E2000-series⁴ Intel® Core® 2⁴ Duo E6000-series⁴ Intel® Core® 2⁴ Duo E7000-series⁴ Intel® Core® 2⁴ Duo E8000-series⁴ Intel® Core® 2⁴ Quad Q6000-series⁴ Intel® Core® 2⁴ Quad Q9000-series⁴ Intel® Core® 2⁴ Quad Q9000-series⁴ Intel® Core® 2⁴ Extreme⁵.⁴ Intel® Core® 2⁴ Extreme⁵.⁴ Intel® Core® 3⁴ Extreme⁵.⁴ Intel® Core® 3⁴ Extreme⁵.⁴ Intel® S38 Hay FSB Intel X38 Express chipset | Intel® Xeon® <sup>5</sup> Series 5200 <sup>4</sup> processor <sup>3</sup> 1066 or 1333 MHz FSB Intel® Xeon® <sup>5</sup> Series 5400 <sup>4</sup> processor <sup>3</sup> 1333 MHz FSB Intel 5400 chipset |
| Expansion slots   | 1 PCIe x16 graphics 1 PCIe x4 (x1 electrical) 2 PCI   | 2 PCle x16 Gen28 Graphics     1 PCle x8 (x4 electrical)     1 PCle x1     3 PCl  | 2 PCle x16 Gen28 Graphics,     2 PCle (x8 mechanically, x4 electrically),     2 PCl slots  |
| Dual configuration capability with select cards   |   | •  | •  |
| ATI FireGL V5600  | •   | •  | •  |
| ATI FireGL V7700  |   | •  | •  |
| NVIDIA Quadro NVS 290   | •   | •  | •  |
| NVIDIA Quadro NVS 440   | •   | •  | •  |
| NVIDIA Quadro NVS 450   |   | •  | •  |
| NVIDIA Quadro FX 370  | •   | •  | •  |
| NVIDIA Quadro FX 570  | •   | •  | •  |
| NVIDIA Quadro FX 1700   | •   | •  | •  |
| NVIDIA Quadro FX 3700   |   | •  | •  |
| NVIDIA Quadro FX 4600   |   | •  | •  |
| NVIDIA Quadro FX 4800   |   | •  | •  |
| NVIDIA Quadro CX  |   | •  | •  |
| NVIDIA Quadro FX 5600   |   |  |  |
| NVIDIA Quadro FX 5800   |   |  |  |
| Controllers and HDs <sup>9, 10</sup>  | <ul> <li>Integrated 4-channel SATA 3.0 Gb/s<br/>controller with RAID 0, 1 and NCQ; up to 2<br/>drives, 1000 MB max.</li> </ul>  | <ul> <li>Integrated SATA 3.0 Gb/s (NCQ with 5<br/>internal and 1 external SATA connectors) with<br/>RAID, up to 4 drives, 4 TB max.; removable<br/>boot drive option</li> </ul>  | Integrated SATA 3.0 Gb/s Controller; RAID 0, 1, 5 capability Up to 3 SATA drives (with the optional optical bay converter kit), or up to 3 of the small form factor SAS drives 3 TB max                  |
| Optical drives <sup>11</sup>  |   |  |  |
| • SATA DVD-ROM  | •   | •  | •  |
| SATA DVD+/-RW Double Layer SuperMulti with LightScribe <sup>12, 13</sup> SATA DVD+/-RW Double Layer SuperMulti <sup>12</sup>                              | •   | •  | •  |
| Blu-Ray Disc DVD+/-RW SuperMulti DL <sup>12, 13, 14</sup>   |   |  |  |
| Communications <sup>15</sup>  | • Integrated Broadcom 5755 10/100/100014<br>LAN (PCIe)  | Integrated Broadcom 5755 NetXtreme<br>Gigabit PCle     Optional Broadcom 5751 NetXtreme<br>Gigabit PCle  | Integrated Broadcom 5755 NetXtreme<br>Gigabit PCle     Optional Broadcom 5751 NetXtreme<br>Gigabit PCle  |









| HP xw8600   | HP xw9400   | HP EliteBook 8530w Mobile Workstation  | HP EliteBook 8730w Mobile Workstatio   |
|---|---|--|--|
| extreme performance with unlimited possibilities  | Ultimate combination of compute and graphics capabilities   | Exceptional graphics in a highly mobile workstation  | The most powerful HP mobile workstation  |
| •   | •   | •  | •  |
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|   |   | •  | •  |
| <ul> <li>Intel® Xeon®<sup>5</sup> Series 5200<sup>4</sup> processor<sup>3</sup> 1066, 1333, or 1600 MHz FSB</li> <li>Intel® Xeon®<sup>5</sup> Series 5400<sup>4</sup> processor<sup>3</sup> 1333 or 1600 MHz FSB</li> <li>Intel 5400 chipset</li> </ul>   | 1 or 2 Dual- or Quad-Core <sup>3</sup> 64-bit AMD Opteron 2000 <sup>2</sup> Series Processors  AMD64 <sup>7</sup> technology  1 MB L2 cache (Dual-Core)  2 x 2 MB L2 cache (Quad-Core)  On-chip memory controller  1 GHz HyperTransport  NVIDIA nForce Professional chipset | <ul> <li>Intel Core 2* Duo or Extreme processor</li> <li>Up to 3.06 GHz/1066 MHz FSB</li> <li>3 MB or 6 MB L2 cache</li> </ul>                   | Intel Core 2 <sup>4</sup> Duo or Extreme processor Up to 3.06 GHz/1066 MHz FSB MB or 6 MB L2 cache   |
| 2 PCle x16 Gen2 <sup>8</sup> Graphics, 2 PCle (x8 mechanically, x4 electrically) 1 PCle x8 (switchable as x1 or x8) 1 PCl-X 133MHz slot 1 PCl-X 135MHz slot   | <ul> <li>2 PCle x16 Graphics</li> <li>2 PCle x16 (x8 bandwidth)</li> <li>2 PCl-X 100 MHz slots</li> <li>1 PCl 32-bit/33 MHz slot</li> </ul>   | 1 ExpressCard/54 slot     1 media card reader  | 1 6-in-1 media card reader TexpressCard/54 slot smart card reader  |
|   |   | ATI Mobility FireGL V5700     NVIDIA Quadro FX 770M     Choice of 15.4-inch diagonal WSXGA+ or WUXGA+ display with resolutions up to 1920 x 1200 | ATI Mobility FireGL V5725     NVIDIA Quadro FX 3700M     NVIDIA Quadro FX 2700M     Choice of 17-inch diagonal WSXGA+, WUXGA or WUXG preamColor display with resolutions up to 1920 x 1200 |
| •   | •   |  |  |
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| •   | •   |  |  |
| • Integrated 6 channel SATA 3.0 Gb/s Controller; RAID 0, 1, 10, 5 capability • Integrated 8 channel SAS 3.0 Gb/s Controller supporting RAID level 0, 1, 10 capability • Optional LSI 8888ELP 8-port, PCle SAS RAID Controller with RAID 0, 1, 5, and 10 capability • Up to 5 SATA or SAS drives | Integrated 6 channel SATA 3.0 Gb/s with RAID, up to 5 SATA drives (5 TB max.) Integrated 8 channel SAS with RAID, up to 5 SAS drives (2.25 TB max.)   | <ul> <li>Integrated SATA, up to 1 drive (120, 160, 250 GB 5400 rpm or 160, 250, 320 GB 7200 rpm)</li> <li>HP 3D DriveGuard</li> </ul>            | <ul> <li>Integrated SATA, up to 1 drive (160, 250 GB 5400 rpm or 160, 250, 320 GB 7200 rpm)</li> <li>HP 3D DriveGuard</li> </ul>   |
|   |   |  |  |
| •   | •   | •  |  |
| •   |   | •  | •  |
|   |   | •  | •  |
| Dual integrated Broadcom 5755 NetXtreme<br>Gigabit PCle     Optional Broadcom 5751 NetXtreme Gigabit<br>PCle     Optional Intel Pro 1000 PT Gigabit Ethernet<br>Controller (PCle)   | Dual NVIDIA Gigabit LANOn- Motherboard  | HP Mobile Broadband Intel Gigabit Network Connection (10/100/1000 NIC)  56k v.92 modem Intel 802.11 a/b/g/ draft-n Bluetooth® 2.0                | Intel Gigabit Network Connection (10/100/1000 NIC)  56k v.92 modem Intel 802.11a/b/g/ draft-n  |

# HP Workstations—Pioneering new innovations

### Performance Tuning Framework

# Your intelligent interface to the underlying power of HP Workstations

The HP Performance Tuning Framework helps you maximize the performance and reliability of your workstation environment by giving you the ability to discover, optimize and manage your unique combination of hardware, graphics drivers, applications, operating system and other system resources—an exclusive HP software innovation that's included free with every HP Workstation sold with a Microsoft operating system.

### Remote Graphics Software

High performance remote access software with a "like local" feel. Get high performance remote desktop access to your 2D, 3D, video, and mediarich applications—on-site or from a remote location through a standard Internet connection. Collaborate with colleagues across geographies, in real-time, using content-rich interactive applications. Sign-in to your remote workstation resources and have the desktop video, keyboard, and mouse follow you to the new access location. Connect a local USB device and have it virtually attach to a remote workstation. Now you can with HP Remote Graphics Software.



# Designing for the environment

HP Workstations are advancing the forefront of industry innovation with a firm commitment to reduce the environmental impact of computing. With optional ENERGY STAR® configurations and 80 PLUS power supplies standard on all new platforms, HP Workstations provide a energy-efficient, conveniently recyclable and environmentally responsible solution.

Certain Windows Vista product features require advanced or additional hardware. See http://www.microsoft.com/windowsvista/getready/hardwarereqs.mspx and http://www.microsoft.com/windowsvista/getready/capable.mspx for details. Windows Vista Upgrade Advisor can help you determine which features of Windows Vista will run on you computer. To download the tool, visit http://www.windowsvista.com/upgradeadvisor.

- Windows Vista Business disk also included for future upgrade if desired. To qualify for this downgrade an end user must be a business (including governmental or educational institutions) and is expected to order at least 25 customer systems with the same custom image
- <sup>2</sup> AMD's numbering is not a measurement of clock speed.
- <sup>3</sup> Quad-Core and Dual Core are designed to improve performance of multithreaded software products and hardware-aware multitasking operating systems and may require appropriate operating system software for full benefits; check with software provider to determine suitability. Not all customers or software applications will necessarily benefit from use of these technologies.
- <sup>4</sup> Intel's numbering is not a measurement of higher performance.
- <sup>5</sup> 64-bit computing on Intel architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel 64 architecture. Processors will not operate (including 32-bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software.
- $^{\circ}$  This workstation does not support the Intel Core 2 Extreme processor over-clocking feature.
- <sup>7</sup> This system requires a separately purchased 64-bit operating system and 64-bit software products to take advantage of the 64-bit processing capabilities of the AMD Opteron processor. Given the wide range of software applications available, performance of a system including a 64-bit operating system will vary.
- 8 I/O card must also be Gen2 in order to realize PCI Express® Base 2.0 Specification (also known as PCIe Gen2) graphics performance.
- <sup>9</sup> Hardware RAID is not supported on Linux systems. The Linux kernel, with built-in software RAID, provides excellent functionality and performance. It is a good alternative to hardware-based RAID. Please visit http://h20000.www2.hp.com/bc/docs/support/SupportManual/c00060684/c00060684.pdf for RAID capabilities with Linux.
- 10 GB=1 billion bytes. Actual formatted capacity is less. Up to 8 GB of hard drive (or system disk) is reserved for the system recovery software (XP and XP Pro). Up to 12 GB of system disk is reserved for system recovery software. (Vista).
- <sup>11</sup> Actual speeds may vary. Does not permit copying of commercially available DVD movies or other copy-right protected materials. Intended for creation and storage of your original material and other lawful uses.
- <sup>12</sup> Double Layer discs can store more data than single layer discs. However, double-layer discs burned with this drive may not be compatible with many existing single-layer DVD drives and players. Note that DVD-RAM cannot read or write to 2.6GB Single Sided/5.2 GB Double Sided Version 1.0 media.
- <sup>13</sup> LightScribe creates a monochrome image. LightScribe media required and sold separately.
- <sup>14</sup> As HD DVD and Blu-ray are new formats containing a new technologies, certain disc, digital connection, compatibility and/or performance issues may arise, and do not constitute defects in the product. Flawless playback on all systems is not guaranteed. Blu-ray Disc movies cannot be played on this Notebook PC.
- 15 The term "10/100/1000" or "Gigabit" Ethernet indicates compliance with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

## Configure and buy HP personal workstations online http://www.hp.com/workstations

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